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Sudden unexpected death in 'epilepsy'—a missed opportunity to diagnose a long QT syndrome

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Misdiagnosing syncope as epilepsy is a recurring problem. Very rarely the consequences may be fatal. We present a case of a 12-year-old boy who was diagnosed as having epilepsy and in whom a retrospective diagnosis of prolonged QT syndrome was made following his unexpected death. This diagnosis was reached by reviewing case notes and his previous EEGs which carried a single lead ECG recording. Support for this diagnosis was provided by further history from his parents and the finding of a prolonged QTc in the father. His EEG at the age of 9 accompanied by the presenting history of recent onset convulsions, sometimes proceeded by brief dizziness, and with one episode occurring in sleep, was shown to clinicians attending a recent International Epilepsy Congress. Only 5/77 familiar with EEG recordings noted the ECG abnormality, but all noted the frequent centro-parietal spikes. This case emphasizes the need to remember the long QT syndrome and, for those who read and report EEG, to review the ECG if one is also recorded.

Sudden death in epilepsy—a historical perspective

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Sudden Death in Epilepsy (SUDEP) has attracted attention recently because of the recognition that it is the most significant single category of mortality in people with chronic epilepsy. Although sudden death was first recorded in the 19th century, for most of this century the subject has been ignored and even denied in some publications during the 1950s and 60s. Between 1970 and 1990 there were occasional publications, but significant general interest in the issue is a recent phenomenon, reflected in major epilepsy conferences, including the ILAE Congress in Dublin and the AES meeting in Boston with a special *Epilepsia* supplement on SUDEP (1997); a significant increase in the number of articles in medical journals and recent inclusion of the subject in medical texts.

Failure to recognize SUDEP in the past probably related to the decline in the numbers of residential institutions for people with epilepsy that were very common in the last century and early this century. Failure to acknowledge SUDEP may be related to efforts at rehabilitation of sufferers from epilepsy into the community encouraged by the advent of AEDs. Epilepsy came to be perceived as a benign condition, a viewpoint that also served to counter stigma. Recent recognition has been influenced by a combination of factors including the experience of bereaved relatives; recent scientific interest; pharmaceutical interest and medico-legal issues. The poster presentation will review the history of SUDEP from the middle of the last century and discuss the potential implications of the growing awareness in this subject.

Identification of differentially expressed genes in human epileptic tissue by high density cDNA array hybridization

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Intractable complex partial seizures represent a significant challenge in the clinical management of epilepsy. Little is known about the underlying gene alterations which might contribute to the pathophysiology. Therefore, to identify genes implicated in this condition we have applied a high density of cDNA microarray differential screening approach. Using robotic systems, cDNA clones from human cDNA libraries were arrayed into 384 well microtitre plates, amplified by PCR and 12 288 clones gridded per nylon filter in duplicate. Radiolabelled mRNA derived probes from control and surgically resected human epileptic hippocampal tissue were hybridized to identical copies of the library filters. The epileptic subject was a 37-year-old female